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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,912	06/25/2001	Sang-Jun Choi	8021-58 (SS-15253-US)	9760

7590 09/16/2003

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EXAMINER

THORNTON, YVETTE C

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 09/16/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/888,912

Applicant(s)

CHOI ET AL.

Examiner

Yvette C. Thornton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-24 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

09/888912 filed on June 25, 2001 and published as US 2002/0076641 A1 on June 20, 2002.

Response to Amendment

1. The amendment to the claims is sufficient to overcome the claim objections set forth in the previous office action.
2. The amendment to the specification has been entered. The range ratios incorporated into the specification does not constitute new matter since the original specification presented the values of "n" based on 100% (i.e., n+m). The same interpretation applies to claims 8-9 and 22.

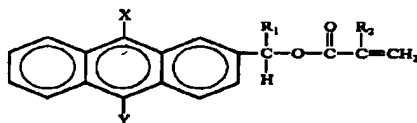
Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Stolka et al. (US 4117239 A). Stolka teaches a process for the preparation of 2-anthryl and substituted 2-anthryl functional monomers and polymers. Stolka teaches that the said anthryl monomer



has the structure:

wherein X and Y are independently

selected from hydrogen, chlorine, bromine, alkyl of 1-4 carbon atoms or phenyl; and R1 is hydrogen or alkyl of 1-6 carbon atoms (c. 3, l. 6-37). Although Stolka fails to exemplify all

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embodiments of the taught formula, one of ordinary skill in the art would readily envisage a compound wherein Y is hydrogen; X is chlorine, bromine or an alkyl of 1-4 carbon atoms; and Y is an alkyl having 2-4 carbon atoms. It is the examiner's position that the use of anthracene meets the claim limitation of $y=2$.

Allowable Subject Matter

5. Claims 7-24 are allowed.

6. The following is an examiner's statement of reasons for allowance: review of the prior art failed to teach and/or suggest copolymers as set forth in instant claims 7-12, 22 and 24 wherein the monomeric units of hydroxystyrene and maleic anhydride are required to be present. One of ordinary skill in the art would not have been motivated nor would it have been obvious to incorporate either a maleic anhydride or a hydroxystyrene monomer unit into the taught polymers of Pavelchek or Stolka as discussed above. The prior art also failed to teach a photosensitive composition as set forth in instant claim 13 wherein R1 and X of the said claimed formula is not equal to hydrogen.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments filed June 24, 2003 have been fully considered but they are not persuasive. Applicants argue that the prior art reference of Stolka fails to teach a fused aromatic ring where R1 is an alkyl group having 2-4 carbon atoms; X is a halogen alkyl or

alkoxy and y is an integer from 1-3. The examiner respectfully disagrees. The examiner is of the position, as discussed above, that although Stolka fails to exemplify all embodiments of the taught formula, one of ordinary skill in the art would readily envisage a compound wherein Y is hydrogen; X is chlorine, bromine or an alkyl of 1-4 carbon atoms; and Y is an alkyl having 2-4 carbon atoms. It is the examiner's position that the use of anthracene meets the claim limitation of $y=2$.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 703-305-0589. The examiner can normally be reached on Monday-Thursday 8-6:30.

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12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C. Baxter can be reached on 703-308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1495.

ycf
September 9, 2003


JANET BAXTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER